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=> d his

     (FILE 'HOME' ENTERED AT 10:54:10 ON 24 FEB 2004)

     FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 10:55:25 ON 24 FEB
     2004
L1         1026 S (SOX OR PAX3 OR PAX6 OR MASH-1 OR MATH-4A OR GFAP OR ISLET)(4
L2         2682 S (DIFFERENTI? OR SPATIAL?)(7A)(NEURONAL OR NEURAL)(6A)(STEM OR
L3            7 S L1 AND L2
L4            3 DUP REM L3 (4 DUPLICATES REMOVED)

=> d bib ab 1-3 l4
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L4   ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
AN   2004:10155 CAPLUS
DN   140:74656
TI   ASK1 inhibits astroglial development via p38 mitogen-activated protein kinase and promotes **neuronal differentiation** in adult hippocampus-derived **progenitor** cells
AU   Faigle, Roland; Brederlau, Anke; Elmi, Muna; Arvidsson, Yvonne; Hamazaki, Tatsuo S.; Uramoto, Hidetaka; Funa, Keiko
CS   Department of Medical Cell Biology, Institute of Anatomy and Cell Biology, Goeteborg University, Goeteborg, Swed.
SO   Molecular and Cellular Biology (2004), 24(1), 280-293
     CODEN: MCEBD4; ISSN: 0270-7306
PB   American Society for Microbiology
DT   Journal
LA   English
AB   The mechanisms controlling **differentiation** and lineage specification of **neural stem** cells are still poorly understood, and many of the mols. involved in this process and their specific functions are yet unknown. We investigated the effect of apoptosis signal-regulating kinase 1 (ASK1) on neural stem cells by infecting adult hippocampus-derived rat progenitors with an adenovirus encoding the constitutively active form of ASK1. Following ASK1 overexpression, a significantly larger number of cells differentiated into neurons and a substantial increase in Mash1 transcription was observed Moreover, a marked depletion of glial cells was observed, persisting even after addnl. treatment of ASK1-infected cultures with potent glia inducers such as leukemia inhibitory factor and bone morphogenetic protein. Anal. of the promoter for glial fibrillary acidic protein revealed that ASK1 acts as a potent inhibitor of glial-specific gene transcription. However, the signal transducers and activators of transcription 3 (STAT3)-binding site in the promoter was dispensable, while the activation of p38 mitogen-activated protein kinase was crucial for this effect, suggesting the presence of a novel mechanism for the inhibition of glial differentiation.
RE.CNT 43   THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4   ANSWER 2 OF 3 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN   2003:420139 BIOSIS
DN   PREV200300420139
TI   The ablation of glial fibrillary acidic protein-positive cells from the adult central nervous system results in the loss of forebrain neural stem cells but not retinal stem cells.
AU   Morshead, Cindi M. [Reprint Author]; Garcia, A. Denize; Sofroniew, Michael V.; van der Kooy, Derek
CS   Department of Surgery, University of Toronto, 1 King's College Circle, Room 1182, Toronto, ON, M5S 1A8, Canada
     cindi.morshead@utoronto.ca
SO   European Journal of Neuroscience, (July 2003) Vol. 18, No. 1, pp. 76-84. print.

ISSN: 0953-816X (ISSN print).
DT Article
LA English
ED Entered STN: 10 Sep 2003
Last Updated on STN: 10 Sep 2003
AB The adult mammalian forebrain subependyma contains neural stem cells (NSCs) capable of self-renewal and multilineage differentiation. The in vivo identification of NSCs has not been definitively addressed using a loss of function approach. Using a transgenic mouse expressing herpes-simplex virus thymidine kinase from the glial fibrillary acidic protein (GFAP) promotor, we have selectively killed dividing GFAP-positive cells in the presence of ganciclovir (GCV) and shown a >95% loss in the numbers of NSCs, as assayed by the formation of clonally derived neurospheres in vitro. This loss is seen following 3 days of GCV exposure in vivo or in vitro only and cannot be rescued by coculturing with pure astrocyte populations or control (green fluorescent protein-expressing) subependymal cells. Exposure to GCV in vitro has no effect on adult retinal stem cells hence, we conclude that adult forebrain NSCs comprise a subpopulation of the GFAP-positive cells within the subependyma.

L4 ANSWER 3 OF 3 MEDLINE on STN DUPLICATE 2
AN 2002448259 MEDLINE
DN 22194573 PubMed ID: 12205678
TI Notch signaling promotes astrogliogenesis via direct CSL-mediated glial gene activation.
AU Ge Weihong; Martinowich Keri; Wu Xiangbing; He Fei; Miyamoto Alison; Fan Guoping; Weinmaster Gerry; Sun Yi Eve
CS Department of Psychiatry and Behavioral Sciences, University of California at Los Angeles, School of Medicine, Los Angeles, California 90024, USA.
SO JOURNAL OF NEUROSCIENCE RESEARCH, (2002 Sep 15) 69 (6) 848-60.
Journal code: 7600111. ISSN: 0360-4012.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200210
ED Entered STN: 20020904
Last Updated on STN: 20021026
Entered Medline: 20021024
AB In the developing central nervous system (CNS), Notch signaling preserves progenitor pools and inhibits neurogenesis and oligodendroglial differentiation. It has recently been postulated that Notch instructively drives astrocyte differentiation. Whether the role of Notch signaling in promoting astroglial differentiation is permissive or instructive has been debated. We report here that the astrogliogenic role of Notch is in part mediated by direct binding of the Notch intracellular domain to the CSL DNA binding protein, forming a transcriptional activation complex onto the astrocyte marker gene, glial fibrillary acidic protein (GFAP). In addition, we found that, in CSL-/- **neural stem** cell cultures, astrocyte **differentiation** was delayed but continued at a normal rate once initiated, suggesting that CSL is involved in regulating the onset of astrogliogenesis. Importantly, although the classical CSL-dependent Notch signaling pathway is intact and able to activate the Notch canonical target promoter during the neurogenic phase, it is unable to activate the **GFAP promoter** during neurogenesis. Therefore, the effect of Notch signaling on target genes is influenced by cellular context in regulation of neurogenesis and gliogenesis.

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     (FILE 'HOME' ENTERED AT 10:54:10 ON 24 FEB 2004)

     FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 10:55:25 ON 24 FEB
     2004
L1         1026 S (SOX OR PAX3 OR PAX6 OR MASH-1 OR MATH-4A OR GFAP OR ISLET)(4
L2         2682 S (DIFFERENTI? OR SPATIAL?)(7A)(NEURONAL OR NEURAL)(6A)(STEM OR
L3            7 S L1 AND L2
L4            3 DUP REM L3 (4 DUPLICATES REMOVED)
L5       153232 S (SOX OR PAX3 OR PAX6 OR MASH-1 OR MATH-4A OR GFAP OR ISLET)
L6           19 S L5(6A)L2
L7           13 DUP REM L6 (6 DUPLICATES REMOVED)

=> d bib ab 1-13 l7

L7   ANSWER 1 OF 13  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2003:591318  CAPLUS
DN   139:146200
TI   Method for inducing differentiation of embryonic stem cells into
     functioning cells
IN   Inoue, Kazutomo; Kim, Dohoon; Gu, Yanjun; Ishii, Michiyo
PA   Yugengaisha Okuma Contactlens Kenkyujo, Japan
SO   PCT Int. Appl., 70 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND  DATE             APPLICATION NO.   DATE
     ---------------     ----  --------         ---------------   --------
PI   WO 2003062405        A2   20030731         WO 2003-JP699     20030127
     WO 2003062405        A3   20031016
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
             PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
             ML, MR, NE, SN, TD, TG
     US 2003162290        A1   20030828         US 2002-54789     20020125
PRAI US 2002-54789        A    20020125
AB   The present invention provides a 4-step method for inducing
     differentiation of embryonic stem cells into functioning cells comprising
     (1) expanding ES cells; (2) inducing Embryoid Bodies in the presence of
     leukemia Inhibitor factor and basic FGF; (3) selection expanding of the
     EBs and (4) differentiation.  According to the present invention, ES cells
     can be differentiated into either insulin producing pancreatic islet like
     cell clusters or nerve like cells.  Thus obtained functioning cells may be
     potential sources of donor cells in cell transplant therapy for many
     patients.

L7   ANSWER 2 OF 13  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2003:211630  CAPLUS
DN   138:396613
TI   Neurotrophins facilitate neuronal differentiation of cultured neural stem
     cells via induction of mRNA expression of basic helix-loop-helix
     transcription factors Mash1 and Math1
AU   Ito, Hisanori; Nakajima, Aki; Nomoto, Hiroshi; Furukawa, Shoei
CS   Laboratory of Molecular Biology, Gifu Pharmaceutical University, Gifu,
     502-8585, Japan
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SO Journal of Neuroscience Research (2003), 71(5), 648-658
CODEN: JNREDK; ISSN: 0360-4012
PB Wiley-Liss, Inc.
DT Journal
LA English
AB Neurogenesis is promoted by basic helix-loop-helix (bHLH) transcription factors Mash1, Math1, or NeuroD but suppressed by another set, Hes1 and Hes5. It remains unknown what kinds of extracellular signals are involved in their regulation; therefore, the effects of neurotrophins on the expression of bHLH factors and neuronal differentiation were investigated by the use of cultured mouse neural stem cells. Each neurotrophin increased Mash1 and Math1 mRNAs of the stem cells growing in the presence of fibroblast growth factor-2 (FGF-2), but did not alter Hes1, Hes5, or NeuroD mRNA levels. Simultaneously, most of the cells expressed nestin but not microtubule-associated protein 2 (MAP2), and remained undifferentiated. FGF-2 removal from the medium reduced the levels of Hes1 and Hes5 mRNAs and increased those of Mash1, Math1, and NeuroD mRNAs, resulting in substantial neuronal differentiation. When the cells were pretreated with brain-derived neurotrophic factor, a neurotrophin, FGF-2 removal enhanced earlier NeuroD expression and generated many more MAP2-pos. cells. The high level of Mash1 and Math1 that had been elevated at FGF-2 withdrawal accelerated NeuroD expression in cooperation with the reduced Hes1 and Hes5 expression. Our present results suggest that neurotrophins stimulate neuronal differentiation by altering the balance of expression of various bHLH transcription factors.
RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:601412 CAPLUS
DN 139:274754
TI Transcriptional profiling of neuronal differentiation by human embryonal carcinoma stem cells in vitro
AU Przyborski, Stefan Alexander; Smith, Stanley; Wood, Andrew
CS School of Biological and Biomedical Science, Science Laboratories, University of Durham, Durham, UK
SO Stem Cells (Miamisburg, OH, United States) (2003), 21(4), 459-471
CODEN: STCEEJ; ISSN: 1066-5099
PB AlphaMed Press
DT Journal
LA English
AB Pluripotent stem cell lines can be induced to differentiate into a range of somatic cell types in response to various stimuli. Such cell-based systems provide powerful tools for the investigation of mols. that modulate cellular development. For instance, the formation of the nervous system is a highly regulated process, controlled by mol. pathways that determine the expression of specific proteins involved in cell differentiation. To begin to decipher this mechanism in humans, we used oligonucleotide microarrays to profile the complex patterns of gene expression during the differentiation of neurons from pluripotent human stem cells. Samples of mRNA were isolated from cultured NTERA2 human embryonal carcinoma stem cells and their retinoic-acid-induced derivs. and were prepared for hybridization on custom microarrays designed to detect the expression of genes primarily associated with the neural lineage. In response to retinoic acid, human NTERA2 cells coordinately regulate the expression of large nos. of neural transcripts simultaneously. Transcriptional profiles of many individual genes aligned closely with expression patterns previously recorded by developing neural cells in vitro and in vivo, demonstrating that cultured human pluripotent stem cells appear to form neurons in a conserved manner. These expts. have produced many new expression data concerning neuronal differentiation from human stem cells in vitro. Of particular interest was the regulated expression of Pax6 and Nkr6d mRNA and the absence of Pax7 transcription, indicating that neurons derived from NTERA2 pluripotent stem cells are characteristic of neuroectodermal

cells of the ventral phenotype.
RE.CNT 56   THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 13 MEDLINE on STN
AN 2003378647 MEDLINE
DN 22795695 PubMed ID: 12914242
TI The induction of neuronal differentiation in the glial fibrillary acid protein positive human neural progenitor cell line.
AU Bai Yun; Lin Changsheng; Hu Qikuan; Li Xiaoxia; Lu Aili; Wang Shuling; Li Lingsong; Shen Li
CS Peking University Stem Cell Research Center, Beijing 100083, China.
SO Beijing Da Xue Xue Bao, (2003 Jun 18) 35 (3) 266-70.
Journal code: 101125284. ISSN: 1671-167X.
CY China
DT Journal; Article; (JOURNAL ARTICLE)
LA Chinese
FS Priority Journals
EM 200308
ED Entered STN: 20030814
Last Updated on STN: 20030827
Entered Medline: 20030826
AB OBJECTIVE: To investigate the ability of human GFAP positive neural progenitor cell line from the subventricular zone (SVZ) to differentiate into neurons. METHODS: Real-time RT-PCR, Western blot analysis and immunocytochemistry were used to examine the expression level of the neural stem cell marker and neuronal-specific marker before and after all-trans-retinoic acid (AT-RA) induction in the GFAP positive neural progenitor cell line. Immunocytochemistry was used to examine the expression of the neuronal-specific marker after transplantation the GFAP positive neural progenitor cell line into the animal model. RESULTS: After induction, in the GFAP positive neural progenitor cell line the expression levels of the neuronal-specific marker increased, while the neural stem cell marker decreased both in mRNA and protein levels. After transplantation into animal model, the **GFAP** positive **neural progenitor** cell line could **differentiate** into neurons. CONCLUSION: The **GFAP** positive **neural progenitor** cell line could be induced to **differentiate** into neurons both in vitro and in vivo.

L7 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:543408 CAPLUS
DN 139:162471
TI Differentiation and morphological integration of neural progenitor cells transplanted into the developing mammalian eye
AU Sakaguchi, D. S.; Van Hoffelen, S. J.; Young, M. J.
CS Department of Zoology and Genetics, Department of Biomedical Sciences, and Neuroscience Program, Iowa State University, Ames, IA, 50011, USA
SO Annals of the New York Academy of Sciences (2003), 995(Tissue Remodeling), 127-139
CODEN: ANYAA9; ISSN: 0077-8923
PB New York Academy of Sciences
DT Journal
LA English
AB Transplantation of neural stem/progenitor cells was proposed as a novel approach for the replacement and repair of damaged CNS tissues. We have evaluated the influence of the host cellular microenvironment upon the survival, differentiation, and integration of neural progenitor cells transplanted into the CNS. Using this approach, the authors have investigated the fate of neural progenitor cells in vivo following transplantation into the developing mammalian eye. Murine brain progenitor cells (mBPCs) isolated from neonatal mice expressing the green fluorescent protein (GFP) transgene were transplanted into the eyes of Brazilian opossums (Monodelphis domestica). Monodelphis pups are born in

an extremely immature, fetal-like state. The eyes of neonatal pups provide a fetal-like environment in which to study cellular interactions between host tissues and transplanted neural progenitor cells. MBPCs were transplanted by intraocular injection in hosts ranging in age from 5 days postnatal to adult. The transplanted cells were easily identified because of their GFP fluorescence. Extensive survival, differentiation, and morphol. integration of mBPCs within the host tissue was observed We found that the younger retinas provided a more supportive environment for the morphol. integration of the transplanted mBPCs. Cells with morphologies characteristic of specific retinal cell types were observed Moreover, some transplanted mBPCs were labeled with antibodies characteristic of specific neural/retinal phenotypes. These results suggest that the host environment strongly influences progenitor cell differentiation and that transplantation of neural progenitor cells may be a useful approach aimed at treating degeneration and pathol. of the CNS.

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:325534 CAPLUS
DN 139:98656
TI SOX10 maintains multipotency and inhibits neuronal differentiation of neural crest stem cells
AU Kim, Jaesang; Lo, Liching; Dormand, Emma; Anderson, David J.
CS Howard Hughes Medical Institute Divison of Biology 216-76, California Institute of Technology, Pasadena, CA, 91125, USA
SO Neuron (2003), 38(1), 17-31
CODEN: NERNET; ISSN: 0896-6273
PB Cell Press
DT Journal
LA English
AB The mechanisms that establish and maintain the multipotency of stem cells are poorly understood. In neural crest stem cells (NCSCs), the HMG-box factor SOX10 preserves not only glial, but surprisingly, also neuronal potential from extinction by lineage commitment signals. The latter function is reflected in the requirement of SOX10 in vivo for induction of MASH1 and PHOX2B, two neurogenic transcription factors. Simultaneously, SOX10 inhibits or delays overt neuronal differentiation, both in vitro and in vivo. However, this activity requires a higher Sox10 gene dosage than does the maintenance of neurogenic potential. The opponent functions of SOX10 to maintain neural lineage potentials, while simultaneously serving to inhibit or delay neuronal differentiation, suggest that it functions in stem or progenitor cell maintenance, in addition to its established role in peripheral gliogenesis.

RE.CNT 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 13 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2003:528890 BIOSIS
DN PREV200300524695
TI PLATELET - DERIVED GROWTH FACTOR - BB GENERATE NEURAL STEM CELLS FROM PROLIFERATING RETINAL ASTROCYTES.
AU Fujii, S. [Reprint Author]; Escano, M. F. T. [Reprint Author]; Kusuhara, S. [Reprint Author]; Tamura, Y. [Reprint Author]; Sasaki, R.; Negi, A. [Reprint Author]
CS Ophthalmology, Kobe University Graduate School of Medicine, Kobe, Japan
SO ARVO Annual Meeting Abstract Search and Program Planner, (2003) Vol. 2003, pp. Abstract No. 1687. cd-rom.
Meeting Info.: Annual Meeting of the Association for Research in Vision and Ophthalmology. Fort Lauderdale, FL, USA. May 04-08, 2003. Association for Research in Vision and Ophthalmology.
DT Conference; (Meeting)
Conference; (Meeting Poster)
Conference; Abstract; (Meeting Abstract)

LA English
ED Entered STN: 12 Nov 2003
Last Updated on STN: 12 Nov 2003
AB Purpose. In this study, we provide evidence that in the mouse retina, neural stem cells could be generated from proliferating retinal astrocytes, which have roles in the initiation and development of proliferative vitreoretinopathy (PVR). Methods. Retinal tissues were dissected from 3 month old C57BL/6J mice and subjected to organ culture incubation with 10 ng/ml of platelet derived growth factor-BB (PDGF-BB) for up to 2 weeks. 5-bromo-2'-deoxy-uridine (BrdU) was added to the cultures for the final 4 hours of incubation. Tissues were subjected to immunohistochemical studies using anti-BrdU and markers specific for neural stem cells, various retinal specific neurons, glial cells. Results. In response to PDGF-BB, astrocytes detached from the retinal tissues, proliferated, and formed extensive epiretinal cellular membranes. Furthermore, the proliferating astrocytes lost their glial acidic fibrillary protein (**GFAP**) expression and de-**differentiated** into **neural stem** cells. PDGF-BB also allowed proliferation of newly-generated neural stem cells via self-renewal, and caused differentiation of these newly-generated neural stem cells into retinal specific neurons, glial cells. Conclusions. Our data supports the hypothesis that proliferation and differentiation of neural stem cells, which could be derived from retinal astrocytes, is involved in epiretinal membrane formation in PVR.

L7 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:856291 CAPLUS
DN 137:347529
TI Neuronal differentiation of neural stem cells into retina nerve cells with introduction of retina-specific homeobox genes
IN Takahashi, Masayo; Haruta, Masatoshi
PA Protech K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002325571	A2	20021112	JP 2001-133721	20010427
PRAI	JP 2001-133721		20010427		

AB A method for inducing differentiation of neural stem cells or neuronal precursor cells into retina nerve cells by introduction of retina-specific homeobox genes. Neural stem cells or neuronal precursor cells are obtained from ocular tissue-derived cells, such as fetal neurons, retinal pigment epithelial cells, or embryonic stem cells. Crx, Chx10, Pax6, or Rax genes, may be used. Differentiation is induced by culturing cells in the presence of retinoic acid (RA) and serum, such as DMEM/F12 optionally containing N2 supplement. Visual cell marker opsin, or bipolar cell marker PKC expressing cells are obtained. A study was performed to investigate whether iris-derived cells could acquire photoreceptor-specific phenotypes as a result of ectopic expression of Crx. Iris-derived cells were infected with a replication-defective recombinant adenovirus. The iris-derived cells infected with Crx-transducing adenovirus expressed rhodopsin, while none of the infected cells with enhanced green fluorescent protein-transducing adenovirus did. Similar results were obtained by using the anti-recoverin antibody that detects photoreceptors and subpopulation of bipolar cells. The results suggested that iris-derived cells have the potential to differentiate into photoreceptors in response to Crx. Iris tissue in the adult mammalian eye retains a remarkable plasticity to give rise to cells expressing neuronal antigens.

L7 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:545835 CAPLUS

DN 135:119253
TI Multipotent neural stem cells from peripheral tissues and uses thereof
IN Toma, Jean; Akhavan, Mahnaz; Fernandes, Karl J. L.; Fortier, Mathieu; Miller, Freda; Golster, Andrew
PA McGill University, Can.
SO PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001053461	A1	20010726	WO 2001-CA47	20010124

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	EP 1255813	A1	20021113	EP 2001-942663	20010124

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2003525034	T2	20030826	JP 2001-553922	20010124
	US 2002016002	A1	20020207	US 2001-916639	20010726
	US 2002123143	A1	20020905	US 2001-991480	20011109
	US 2003003574	A1	20030102	US 2002-99539	20020315
	US 2004033597	A1	20040219	US 2003-181508	20030401
PRAI	US 2000-490422	A	20000124		
	US 2000-670049	A	20000925		
	US 1996-24590P	P	19960826		
	US 1996-24456P	P	19960827		
	US 1997-920272	A2	19970822		
	WO 2001-CA47	W	20010124		
	US 2001-916639	A2	20010726		
	US 2001-991480	A2	20011109		

AB This invention relates to multipotent neural stem cells, purified from the peripheral nervous system of mammals, capable of differentiating into neural and non-neural cell types. These stem cells provide an accessible source for autologous transplantation into CNS, PNS, and other damaged tissues. Multipotent neural stem cells were purified from mouse olfactory epithelium. Greater than 95% of the cells expressed nestin, a marker for stem cells and neural stem cells.

L7 ANSWER 10 OF 13 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
AN 2002:121638 SCISEARCH
GA The Genuine Article (R) Number: 520DD
TI Structure of cell clusters formed in cultures of dissociated human embryonic brain
AU Revishchin A V (Reprint); Poltavtseva R A; Marei M V; Aleksandrova M A; Viktorov I V; Korochkin L I; Sukhikh G T
CS Russian Acad Sci, Inst Gene Biol, Moscow, Russia; Russian Acad Sci, AN Severtsov Inst Ecol & Evolut Problems, Moscow, Russia; Russian Acad Sci, NK Koltsov Dev Biol Inst, Moscow, Russia; Russian Acad Med Sci, Inst Brain, Moscow 109801, Russia; Inst Med Biol, Moscow, Russia
CYA Russia
SO BULLETIN OF EXPERIMENTAL BIOLOGY AND MEDICINE, (SEP 2001) Vol. 132, No. 3, pp. 856-860.
Publisher: CONSULTANTS BUREAU, 233 SPRING ST, NEW YORK, NY 10013 USA.
ISSN: 0007-4888.
DT Article; Journal
LA English

REC Reference Count: 8
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS
AB Cell clusters in a culture of dissociated brain from human fetuses at 8-12 weeks gestation in a serum-free growth medium were studied by immunohistochemical methods and electron microscopy. Heterogeneity of cell population in culture was demonstrated. Despite the influence of proliferation-stimulating factors, cell clusters contained not only nestin-immunopositive stem cells, but also beta-tubulin-, vimentin-, and **GFAP**-positive cells **differentiating** by the **neural** pathway. **Stem** cells were localized on the surface of clusters. The percentage of stem cells in large clusters was lower than in small clusters.

L7 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:470329 CAPLUS
DN 127:159291
TI Pax6 controls progenitor cell identity and neuronal fate in response to graded Shh signaling
AU Ericson, J.; Rashbass, P.; Schedl, A.; Brenner-Morton, S.; Kawakami, A.; van Heyningen, V.; Jessell, T. M.; Briscoe, J.
CS Howard Hughes Med. Inst., Dep. Biochemistry and Molecular Biophysics, Columbia Univ., New York, NY, 10032, USA
SO Cell (Cambridge, Massachusetts) (1997), 90(1), 169-180
CODEN: CELLB5; ISSN: 0092-8674
PB Cell Press
DT Journal
LA English
AB Distinct classes of motor neurons and ventral interneurons are generated by the graded signaling activity of Sonic hedgehog (Shh). Shh controls neuronal fate by establishing different progenitor cell populations in the ventral neural tube that are defined by the expression of Pax6 and Nkx2.2. Pax6 establishes distinct ventral progenitor cell populations and controls the identity of motor neurons and ventral interneurons, mediating graded Shh signaling in the ventral spinal cord and hindbrain.

L7 ANSWER 12 OF 13 MEDLINE on STN DUPLICATE 1
AN 95395601 MEDLINE
DN 95395601 PubMed ID: 7666199
TI Induction of a serotonergic and neuronal phenotype in thyroid C-cells.
AU Clark M S; Lanigan T M; Page N M; Russo A F
CS Molecular Biology Program, University of Iowa, Iowa City 52242, USA.
NC DK25295 (NIDDK)
HD23144 (NICHD)
HD25969 (NICHD)
+
SO JOURNAL OF NEUROSCIENCE, (1995 Sep) 15 (9) 6167-78.
Journal code: 8102140. ISSN: 0270-6474.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199510
ED Entered STN: 19951020
Last Updated on STN: 19951020
Entered Medline: 19951012
AB We have investigated whether rat thyroid C-cells can acquire a phenotype similar to serotonergic neurons. C-cells are neural crest derived endocrine cells with some intrinsic neuronal and serotonergic properties. A relatively simple isolation scheme yielded cultures of about 50% initial purity, as measured by fluorescence activated cell sorting. These enriched C-cells could extend neurites up to 550 microns on a laminin-containing substratum in the presence of NGF. The cultured C-cells expressed neurofilaments and this expression was enhanced by NGF treatment. The C-cells also expressed two markers of the sympathoadrenal

neural crest lineage, the mammalian achaete scute homolog-1 (MASH-1) transcription factor, and the B2 cell surface antigen. Interestingly, MASH-1 was not detectable after the C-cells were placed in culture, which is consistent with neuronal **differentiation**, since **MASH -1** is only expressed in **neuronal progenitors** prior to **differentiation**. We then demonstrated that C-cells possess the fundamental features of serotonergic neurons: synthesis and secretion, uptake, and feedback control. The enriched C-cells, as well as the CA77 C-cell line, showed 5-HT immunostaining, expression of tryptophan hydroxylase mRNA, 5-HT1B autoreceptor mRNA, and 5-HT transporter mRNA and activity. NGF greatly induced 5-HT transporter activity as determined by sensitivity to sertraline, a selective 5-HT reuptake inhibitor. Based on these results, we propose that thyroid C-cells are derived from a vagal sympathoadrenal progenitor, similar to serotonergic enteric neurons, and can undergo neuronal transdifferentiation. Hence, these cells should provide suitable and convenient models for molecular and cellular studies on serotonergic neurons.

L7 ANSWER 13 OF 13 MEDLINE on STN DUPLICATE 2
AN 95038830 MEDLINE
DN 95038830 PubMed ID: 7951315
TI PAX6 gene dosage effect in a family with congenital cataracts, aniridia, anophthalmia and central nervous system defects.
CM Erratum in: Nat Genet 1994 Oct;8(2):203
AU Glaser T; Jepeal L; Edwards J G; Young S R; Favor J; Maas R L
CS Department of Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, Massachusetts 02115.
NC EY10123 (NEI)
SO NATURE GENETICS, (1994 Aug) 7 (4) 463-71.
Journal code: 9216904. ISSN: 1061-4036.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199412
ED Entered STN: 19950110
Last Updated on STN: 19960129
Entered Medline: 19941229
AB The human eye malformation aniridia results from haploinsufficiency of PAX6, a paired box DNA-binding protein. To study this dosage effect, we characterized two PAX6 mutations in a family segregating aniridia and a milder syndrome consisting of congenital cataracts and late onset corneal dystrophy. The nonsense mutations, at codons 103 and 353, truncate PAX6 within the N-terminal paired and C-terminal PST domains, respectively. The wild-type PST domain activates transcription autonomously and the mutant form has partial activity. A compound heterozygote had severe craniofacial and central nervous system defects and no eyes. The pattern of malformations is similar to that in homozygous Sey mice and suggests a critical role for **PAX6** in controlling the migration and **differentiation** of specific **neuronal progenitor** cells in the brain.

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     (FILE 'HOME' ENTERED AT 10:54:10 ON 24 FEB 2004)

     FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 10:55:25 ON 24 FEB
     2004
L1         1026 S (SOX OR PAX3 OR PAX6 OR MASH-1 OR MATH-4A OR GFAP OR ISLET)(4
L2         2682 S (DIFFERENTI? OR SPATIAL?)(7A)(NEURONAL OR NEURAL)(6A)(STEM OR
L3            7 S L1 AND L2
L4            3 DUP REM L3 (4 DUPLICATES REMOVED)
L5       153232 S (SOX OR PAX3 OR PAX6 OR MASH-1 OR MATH-4A OR GFAP OR ISLET)
L6           19 S L5(6A)L2
L7           13 DUP REM L6 (6 DUPLICATES REMOVED)
L8           49 S SOX(3A)(PROMOTER OR REGULATORY(W)(SEQUENCE OR ELEMENT))
L9            0 S L8 AND L2
L10       19320 S (DIFFERENTI? OR SPATIAL?)(10A)(NEURONAL OR NEURAL)(6A)CELL
L11           0 S L8 AND L10
L12        9140 S SOX
L13           8 S L12(8A)L10
L14           5 DUP REM L13 (3 DUPLICATES REMOVED)

=> d bib ab 1-5 l14

L14  ANSWER 1 OF 5     MEDLINE on STN                    DUPLICATE 1
AN   2003495901      MEDLINE
DN   PubMed ID: 14522876
TI   Neural crest development is regulated by the transcription factor Sox9.
AU   Cheung Martin; Briscoe James
CS   Developmental Neurobiology, National Institute for Medical Research, Mill
     Hill, London, NW7 1AA, UK.
SO   Development (Cambridge, England), (2003 Dec) 130 (23) 5681-93.
     Journal code: 8701744. ISSN: 0950-1991.
CY   England: United Kingdom
DT   Journal; Article; (JOURNAL ARTICLE)
LA   English
FS   Priority Journals
EM   200401
ED   Entered STN: 20031024
     Last Updated on STN: 20040131
     Entered Medline: 20040130
AB   The neural crest is a transient migratory population of stem cells derived
     from the dorsal neural folds at the border between neural and non-neural
     ectoderm.  Following induction, prospective neural crest cells are
     segregated within the neuroepithelium and then delaminate from the neural
     tube and migrate into the periphery, where they generate multiple
     differentiated cell types.  The intrinsic determinants that direct this
     process are not well defined.  Group E Sox genes (Sox8, Sox9 and Sox10)
     are expressed in the prospective neural crest and Sox9 expression precedes
     expression of premigratory neural crest markers.  Here, we show that group
     E Sox genes act at two distinct steps in neural crest differentiation.
     Forced expression of Sox9 promotes neural-crest-like properties in neural
     tube progenitors at the expense of central nervous system neuronal
     differentiation.  Subsequently, in migratory neural crest cells, SoxE gene
     expression biases cells towards glial cell and melanocyte fate, and away
     from neuronal lineages.  Although SoxE genes are sufficient to initiate
     neural crest development they do not efficiently induce the delamination
     of ectopic neural crest cells from the neural tube consistent with the
     idea that this event is independently controlled.  Together, these data
     identify a role for group E Sox genes in the initiation of
     neural crest development and later SoxE genes influence the
     differentiation pathway adopted by migrating neural crest
     cells.
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L14 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:406422 CAPLUS
DN 139:258595
TI Modulation of SOX2 and SOX3 gene expression during differentiation of human neuronal precursor cell line NTERA2
AU Stevanovic, Milena
CS Institute of Molecular Genetics and Genetic Engineering, Belgrade, 11001, Yugoslavia
SO Molecular Biology Reports (2003), 30(2), 127-132
CODEN: MLBRBU; ISSN: 0301-4851
PB Kluwer Academic Publishers
DT Journal
LA English
AB The SOX genes comprise a family of transcriptional regulators implicated in the control of nervous system development. The developing brain is the major site of expression of many Sox genes. Sox2 and Sox3 genes are predominantly expressed in the immature, undifferentiated cells of the neural epithelium throughout the entire CNS. NTERA2 is a human embryonal carcinoma cell line that phenotypically represents undifferentiated, pluripotent embryonic stem cells. In the presence of retinoic acid, cells differentiate into mature neurons providing an in vitro model for studying human genes that promote and regulate neural differentiation. In this study it is shown for the first time that the retinoic acid-induced neuronal differentiation of NTERA2 cells is accompanied by down-regulation of SOX2 and up-regulation of SOX3 gene during early phases of induction. These data suggest that the effects of retinoic acid on neural differentiation of NTERA2 EC cells might be mediated by modulation of SOX2 and SOX3 gene expression.
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:325534 CAPLUS
DN 139:98656
TI SOX10 maintains multipotency and inhibits neuronal differentiation of neural crest stem cells
AU Kim, Jaesang; Lo, Liching; Dormand, Emma; Anderson, David J.
CS Howard Hughes Medical Institute Divison of Biology 216-76, California Institute of Technology, Pasadena, CA, 91125, USA
SO Neuron (2003), 38(1), 17-31
CODEN: NERNET; ISSN: 0896-6273
PB Cell Press
DT Journal
LA English
AB The mechanisms that establish and maintain the multipotency of stem cells are poorly understood. In neural crest stem cells (NCSCs), the HMG-box factor SOX10 preserves not only glial, but surprisingly, also neuronal potential from extinction by lineage commitment signals. The latter function is reflected in the requirement of SOX10 in vivo for induction of MASH1 and PHOX2B, two neurogenic transcription factors. Simultaneously, SOX10 inhibits or delays overt neuronal differentiation, both in vitro and in vivo. However, this activity requires a higher Sox10 gene dosage than does the maintenance of neurogenic potential. The opponent functions of SOX10 to maintain neural lineage potentials, while simultaneously serving to inhibit or delay neuronal differentiation, suggest that it functions in stem or progenitor cell maintenance, in addition to its established role in peripheral gliogenesis.
RE.CNT 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:294609 CAPLUS
DN 134:350853
TI Roles of Sox factors in neural determination: Conserved signaling in

evolution?
AU Sasai, Yoshiki
CS Department of Medical Embryology and Neurobiology, Kyoto University, Kyoto, 606-8507, Japan
SO International Journal of Developmental Biology (2001), 45(1, Spec.), 321-326
CODEN: IJDBE5; ISSN: 0214-6282
PB University of the Basque Country Press
DT Journal; General Review
LA English
AB A review, with 45 refs. Neural differentiation in amphibian embryos is initiated by the neural inducers emanating from the Spemann-Mangold organizer. The fate of uncommitted ectoderm is determined by graded BMP activity along the dorsal-ventral axis. Several transcriptional regulators acting in early neural differentiation have been identified, including Sox, Zic, Pou, HLH, and Fox factors. In this paper, I review recent mol. studies on neural determination, focusing mainly on Sox factors. I also discuss the possible conservation of regulatory factors in neural differentiation, comparing Xenopus and Drosophila counterparts.
RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:191362 CAPLUS
DN 128:306478
TI Xenopus Zic-related-1 and Sox-2, two factors induced by chordin, have distinct activities in the initiation of neural induction
AU Mizuseki, Kenji; Kishi, Masashi; Matsui, Masaru; Nakanishi, Shigetada; Sasai, Yoshiki
CS Department of Biological Sciences, Kyoto University Faculty of Medicine, Sakyo, Kyoto, 606, Japan
SO Development (Cambridge, United Kingdom) (1998), 125(4), 579-587
CODEN: DEVPED; ISSN: 0950-1991
PB Company of Biologists Ltd.
DT Journal
LA English
AB In a differential screen for downstream genes of the neural inducers, we identified two extremely early neural genes induced by chordin and suppressed by BMP-4: Zic-related-1 (Zic-r1), a zinc finger factor related to the Drosophila pair-rule gene odd-paired, and Sox-2, a Sry-related HMG factor. Expression of the two genes is first detected widely in the prospective neuroectoderm at the beginning of gastrulation, following the onset of chordin expression and preceding that of Neurogenin (Xngnr-1). Zic-r1 mRNA injection activates the proneural gene Xngnr-1, and initiates neural and neuronal differentiation in isolated animal caps and in vivo. In contrast, Sox-2 alone is not sufficient to cause neural differentiation, but can work synergistically with FGF signaling to initiate neural induction. Thus, Zic-r1 acts in the pathway bridging the neural inducer with the downstream proneural genes, while Sox-2 makes the ectoderm responsive to extracellular signals, demonstrating that the early phase of neural induction involves simultaneous activation of multiple functions.
RE.CNT 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> d his

     (FILE 'HOME' ENTERED AT 14:12:20 ON 24 FEB 2004)

     FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 14:12:35 ON 24 FEB
     2004
L1         1050 S (PAX3 OR PAX6 OR MASH-1 OR MATH-4A OR GFAP OR ISLET)(5A)(PROM
L2         7897 S (NEURAL OR NEURONAL)(6A)(STEM OR PROGENITOR)(W)CELL
L3           25 S L1 AND L2
L4           13 DUP REM L3 (12 DUPLICATES REMOVED)
L5          365 S (DNA OR NUCLEIC(W)ACID OR POLYNUCLEOTIDE) AND L1
L6          218 S (PAX3 OR PAX6 OR MASH-1)(5A)(PROMOTER OR REGULATORY(W)(ELEMEN
L7      3092252 S (DNA OR NUCLEIC(W)ACID OR POLYNUCLEOTIDE)
L8          127 S L7 AND L6
L9           70 DUP REM L8 (57 DUPLICATES REMOVED)

=> d au ti so 40-70 l9
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L9   ANSWER 40 OF 70   MEDLINE on STN   DUPLICATE 15
AU   Li J; Chen F; Epstein J A
TI   Neural crest expression of Cre recombinase directed by the proximal
     Pax3 promoter in transgenic mice.
SO   Genesis (New York, N.Y. : 2000), (2000 Feb) 26 (2) 162-4.
     Journal code: 100931242. ISSN: 1526-954X.

L9   ANSWER 41 OF 70   MEDLINE on STN
AU   Skerjanc I S; Wilton S
TI   Myocyte enhancer factor 2C upregulates MASH-1 expression and induces
     neurogenesis in P19 cells.
SO   FEBS LETTERS, (2000 Apr 21) 472 (1) 53-6.
     Journal code: 0155157. ISSN: 0014-5793.

L9   ANSWER 42 OF 70   CAPLUS   COPYRIGHT 2004 ACS on STN
IN   Gruss, Peter; Kammandel, Birgitta
TI   Regulatory sequences of Pax genes involved in pancreas-specific gene
     expression
SO   PCT Int. Appl., 79 pp.
     CODEN: PIXXD2

L9   ANSWER 43 OF 70   CAPLUS   COPYRIGHT 2004 ACS on STN
AU   Hussain, Mehboob A.; Habener, Joel F.
TI   Glucagon gene transcription activation mediated by synergistic
     interactions of pax-6 and cdx-2 with the p300 co-activator
SO   Journal of Biological Chemistry (1999), 274(41), 28950-28957
     CODEN: JBCHA3; ISSN: 0021-9258

L9   ANSWER 44 OF 70   MEDLINE on STN   DUPLICATE 16
AU   Galibert M D; Yavuzer U; Dexter T J; Goding C R
TI   Pax3 and regulation of the melanocyte-specific tyrosinase-related
     protein-1 promoter.
SO   JOURNAL OF BIOLOGICAL CHEMISTRY, (1999 Sep 17) 274 (38) 26894-900.
     Journal code: 2985121R. ISSN: 0021-9258.

L9   ANSWER 45 OF 70   MEDLINE on STN   DUPLICATE 17
AU   Bendall A J; Ding J; Hu G; Shen M M; Abate-Shen C
TI   Msx1 antagonizes the myogenic activity of Pax3 in migrating limb muscle
     precursors.
SO   DEVELOPMENT, (1999 Nov) 126 (22) 4965-76.
     Journal code: 8701744. ISSN: 0950-1991.

L9   ANSWER 46 OF 70   MEDLINE on STN
AU   Li J; Liu K C; Jin F; Lu M M; Epstein J A
TI   Transgenic rescue of congenital heart disease and spina bifida in Splotch
     mice.

SO   DEVELOPMENT, (1999 Jun) 126 (11) 2495-503.
      Journal code: 8701744. ISSN: 0950-1991.

L9   ANSWER 47 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AU   Stober, Gerald; Syagailo, Yana V.; Okladnova, Olga; Jungkunz, Gerd; Knapp, Michael; Beckmann, Helmut; Lesch, Klaus-Peter
TI   Functional PAX-6 gene-linked polymorphic region: potential association with paranoid schizophrenia
SO   Biological Psychiatry (1999), 45(12), 1585-1591
      CODEN: BIPCBF; ISSN: 0006-3223

L9   ANSWER 48 OF 70   MEDLINE on STN
AU   Xu P X; Zhang X; Heaney S; Yoon A; Michelson A M; Maas R L
TI   Regulation of Pax6 expression is conserved between mice and flies.
SO   DEVELOPMENT, (1999 Jan) 126 (2) 383-95.
      Journal code: 8701744. ISSN: 0950-1991.

L9   ANSWER 49 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AU   Samochowiec, Jerzy; Rottmann, Matthias; Okladnova, Olga; Syagailo, Yana; Stober, Gerald; Sander, Thomas; Muhlbauer, Eckhard; Smolka, Michael; Tranitz, Michael; Winterer, Georg; Rommelspacher, Hans; Schmidt, Lutz G.; Lesch, Klaus-Peter
TI   Association analysis of a PAX-6 gene promoter-associated polymorphic repeat with alcohol dependence
SO   Addiction Biology (1999), 4(3), 323-328
      CODEN: ADBIFN; ISSN: 1355-6215

L9   ANSWER 50 OF 70   MEDLINE on STN   DUPLICATE 18
AU   Andersen F G; Jensen J; Heller R S; Petersen H V; Larsson L I; Madsen O D; Serup P
TI   Pax6 and Pdx1 form a functional complex on the rat somatostatin gene upstream enhancer.
SO   FEBS letters, (1999 Feb 26) 445 (2-3) 315-20.
      Journal code: 0155157. ISSN: 0014-5793.

L9   ANSWER 51 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AU   Barber, T. D.; Barber, M. C.; Cloutier, T. E.; Friedman, T. B.
TI   PAX3 gene structure, alternative splicing and evolution
SO   Gene (1999), 237(2), 311-319
      CODEN: GENED6; ISSN: 0378-1119

L9   ANSWER 52 OF 70   MEDLINE on STN   DUPLICATE 19
AU   Andersen F G; Heller R S; Petersen H V; Jensen J; Madsen O D; Serup P
TI   Pax6 and Cdx2/3 form a functional complex on the rat glucagon gene promoter G1-element.
SO   FEBS LETTERS, (1999 Feb 26) 445 (2-3) 306-10.
      Journal code: 0155157. ISSN: 0014-5793.

L9   ANSWER 53 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AU   Liu, Janice J.; Kao, Winston W-Y.; Wilson, Steven E.
TI   Corneal epithelium-specific mouse keratin K12 promoter
SO   Experimental Eye Research (1999), 68(3), 295-301
      CODEN: EXERA6; ISSN: 0014-4835

L9   ANSWER 54 OF 70   MEDLINE on STN   DUPLICATE 20
AU   Okladnova O; Syagailo Y V; Tranitz M; Riederer P; Stober G; Mossner R; Lesch K P
TI   Functional characterization of the human PAX3 gene regulatory region.
SO   GENOMICS, (1999 Apr 1) 57 (1) 110-9.
      Journal code: 8800135. ISSN: 0888-7543.

L9   ANSWER 55 OF 70   MEDLINE on STN   DUPLICATE 21
AU   Kammandel B; Chowdhury K; Stoykova A; Aparicio S; Brenner S; Gruss P
TI   Distinct cis-essential modules direct the time-space pattern of the Pax6

gene activity.
SO DEVELOPMENTAL BIOLOGY, (1999 Jan 1) 205 (1) 79-97.
Journal code: 0372762. ISSN: 0012-1606.

L9 ANSWER 56 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AU Ban, Nobuhiro; Kuroe, Akira; Watanabe, Rie; Miyawaki, Kazumasa; Yamada, Yuichiro; Tsuda, Kinsuke
TI The mechanism of BETA2 gene expression in pancreatic β-cell
SO Bunshi Tonyobyogaku (1999), 10, 67-71
CODEN: BTONEL

L9 ANSWER 57 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AU Gopal-Srivastava, Rashmi; Cvekl, Ales; Piatigorsky, Joram
TI Involvement of retinoic acid/retinoid receptors in the regulation of murine αB-crystallin/small heat shock protein gene expression in the lens
SO Journal of Biological Chemistry (1998), 273(28), 17954-17961
CODEN: JBCHA3; ISSN: 0021-9258

L9 ANSWER 58 OF 70 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
AU Epstein J A; Song B L; Lakkis M; Wang C Y (Reprint)
TI Tumor-specific PAX3-FKHR transcription factor, but not PAX3, activates the platelet-derived growth factor alpha receptor
SO MOLECULAR AND CELLULAR BIOLOGY, (JUL 1998) Vol. 18, No. 7, pp. 4118-4130.
Publisher: AMER SOC MICROBIOLOGY, 1325 MASSACHUSETTS AVENUE, NW, WASHINGTON, DC 20005-4171.
ISSN: 0270-7306.

L9 ANSWER 59 OF 70 MEDLINE on STN DUPLICATE 22
AU Sharon-Friling R; Richardson J; Sperbeck S; Lee D; Rauchman M; Maas R; Swaroop A; Wistow G
TI Lens-specific gene recruitment of zeta-crystallin through Pax6, Nrl-Maf, and brain suppressor sites.
SO MOLECULAR AND CELLULAR BIOLOGY, (1998 Apr) 18 (4) 2067-76.
Journal code: 8109087. ISSN: 0270-7306.

L9 ANSWER 60 OF 70 MEDLINE on STN DUPLICATE 23
AU Xu Z P; Saunders G F
TI PAX6 intronic sequence targets expression to the spinal cord.
SO DEVELOPMENTAL GENETICS, (1998) 23 (4) 259-63.
Journal code: 7909963. ISSN: 0192-253X.

L9 ANSWER 61 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AU Williams, Sonya C.; Altmann, Curtis R.; Chow, Robert L.; Hemmati-Brivanlou, Ali; Lang, Richard A.
TI A highly conserved lens transcriptional control element from the Pax-6 gene
SO Mechanisms of Development (1998), 73(2), 225-229
CODEN: MEDVE6; ISSN: 0925-4773

L9 ANSWER 62 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AU Okladnova, Olga; Syagailo, Yana V.; Mossner, Rainald; Riederer, Peter; Lesch, Klaus-Peter
TI Regulation of PAX-6 gene transcription: alternate promoter usage in human brain
SO Molecular Brain Research (1998), 60(2), 177-192
CODEN: MBREE4; ISSN: 0169-328X

L9 ANSWER 63 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AU Massuda, edmond S.; Dunphy, Edward J.; Redman, Rebecca A.; Schrieber, Jennifer J.; Nauta, Lauren E.; Barr, Frederic G.; Maxwell, Ian H.; Cripe, Timothy P.
TI Regulated expression of the diphtheria toxin A chain by a tumor-specific chimeric transcription factor results in selective toxicity for alveolar

rhabdomyosarcoma cells
SO Proceedings of the National Academy of Sciences of the United States of America (1997), 94(26), 14701-14706
CODEN: PNASA6; ISSN: 0027-8424

L9 ANSWER 64 OF 70 MEDLINE on STN DUPLICATE 24
AU Xu Z P; Saunders G F
TI Transcriptional regulation of the human **PAX6** gene **promoter**.
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1997 Feb 7) 272 (6) 3430-6.
Journal code: 2985121R. ISSN: 0021-9258.

L9 ANSWER 65 OF 70 MEDLINE on STN
AU Sander M; Neubuser A; Kalamaras J; Ee H C; Martin G R; German M S
TI Genetic analysis reveals that PAX6 is required for normal transcription of pancreatic hormone genes and islet development.
SO GENES AND DEVELOPMENT, (1997 Jul 1) 11 (13) 1662-73.
Journal code: 8711660. ISSN: 0890-9369.

L9 ANSWER 66 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AU Plaza, Serge; Langlois, Marie-Claire; Turque, Nathalie; Lecornet, Sebastien; Bailly, Manuella; Begue, Agnes; Quatannens, Brigitte; Dozier, Christine; Saule, Simon
TI The homeobox-containing Engrailed (En-1) product down-regulates the expression of Pax-6 through a **DNA** binding-independent mechanism
SO Cell Growth & Differentiation (1997), 8(10), 1115-1125
CODEN: CGDIE7; ISSN: 1044-9523

L9 ANSWER 67 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AU Natoli, Thomas A.; Ellsworth, Mary Kay; Wu, Chuanzhen; Gross, Kenneth W.; Pruitt, Steven C.
TI Positive and negative **DNA** sequence elements are required to establish the pattern of Pax3 expression
SO Development (Cambridge, United Kingdom) (1997), 124(3), 617-626
CODEN: DEVPED; ISSN: 0950-1991

L9 ANSWER 68 OF 70 MEDLINE on STN DUPLICATE 25
AU Plaza S; Turque N; Dozier C; Bailly M; Saule S
TI C-Myb acts as transcriptional activator of the quail **PAX6** (PAX-QNR) **promoter** through two different mechanisms.
SO ONCOGENE, (1995 Jan 19) 10 (2) 329-40.
Journal code: 8711562. ISSN: 0950-9232.

L9 ANSWER 69 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AU Chalepakis, Georges; Wijnholds, Jan; Giese, Peter; Schachner, Melitta; Gruss, Peter
TI Characterization of Pax-6 and Hoxa-1 binding to the promoter region of the neural cell adhesion molecule L1
SO DNA and Cell Biology (1994), 13(9), 891-900
CODEN: DCEBE8; ISSN: 1044-5498

L9 ANSWER 70 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AU Plaza, Serge; Dozier, Christine; Saule, Simon
TI Quail PAX-6 (PAX-QNR) encodes a transcription factor able to bind and trans-activate its own promoter
SO Cell Growth & Differentiation (1993), 4(12), 1041-50
CODEN: CGDIE7; ISSN: 1044-9523

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